CLAIMS

What is claimed is:

1.   A system for providing a server-on-a-board on a computing device, the computing device including at least a processor and an optional mass storage device, the system comprising:

     bus interface logic for interfacing between the computing device and the system, the bus interface logic allowing the computing device to detect the system;

     a local control BIOS coupled with the bus interface logic, the local control BIOS for booting up the server and preparing the computing device for use as the server; and

     a memory for storing a server image for the server, the server image being provided to the computing device using the local control BIOS.

2.   The system of claim 1 further comprising:

     a plurality of control button connectors;

     a plurality of buttons, the plurality of control button connectors for allowing the server to be turned on, shut down gracefully, or restored to its initial state, by a single press of at least one of the plurality of buttons connected to the plurality of control button connectors.

     a plurality of LED and LCD connectors allowing the system status to be displayed or shown.

3.   The system of claim 1 wherein the memory is a flash memory.

4.   The system of claim 1 further comprising:

control logic.

5.   The system of claim 4 further comprising:

a push button; and

wherein the control logic further includes a one-button init connector, coupled with

the push button, for restoring the server to a default state in response to the push button

being depressed for a particular time.

6.   The system of claim 4 further comprising:

a push button; and

wherein the control logic further includes a shut-down connector, coupled with the

push button, the shut-down connector shutting down the server gracefully if the push button

is pressed for a particular time.

7.   The system of claim 4 wherein the control logic further includes a power-on

connector; and

wherein the control logic further includes a power-on connector connecting to the power-on

connector of the system board, coupled with the shut-down push button, the power-on

connector further turns the power supply on if the push button is depressed when the

computing device is supplied with AC power.

8.   The system of claim 4 further comprising:

a light emitting diode (LED) connector; and

wherein the control logic further includes a status LED connector coupled with the

LED for indicating a operating status of the system.

9.   The system of claim 4 further comprising:

a light emitting diode (LED) connector; and

wherein the control logic further includes a power-on LED connector coupled with

the LED for indicating a power status of the system.

10.   The system of claim 4 further comprising:

a liquid crystal display (LCD) connector; and

wherein the control logic further includes a LCD display connector coupled with the

LCD for indicating a operating status of the system.

11.   The system of claim 1 wherein the bus interface logic, the local BIOS control

logic, a flash memory and a set of control button connectors, light emitting diodes (LED)

connectors and a liquid crystal display (LCD) connector are incorporated into a single board.

12.   A method for providing a server-on-a-board on a computing device, the

computing device including at least a processor and an optional mass storage device, the

method comprising the steps of:

(a)   providing a board including bus interface logic, a local control BIOS, a flash

memory, the bus interface logic for interfacing between the computing device and the

system, the bus interface logic allowing the computing device to detect the system, the local control BIOS coupled with the bus interface logic, the local control BIOS for booting up the server and preparing the computing device for use as the server, the memory for storing a server image for the server, the server image being provided to the computing device using the local control BIOS; and

       (b)   allowing a user to utilize the server access using the board.

13.   The method of claim 12 wherein the board further includes a plurality of control button connectors, a plurality of light emitting diodes (LED) connectors and a liquid crystal display (LCD) connector, the plurality of control button connectors allowing the server to be turned on, shut down gracefully, or restored to an initial state, by a single press of buttons connected to the plurality of control button connectors, the plurality of LED connectors and the LCD connector allowing the system status to be displayed or shown.

14.   The method of claim 12 wherein the memory is a flash memory.

15.   The method of claim 12 wherein the board further includes control logic.

16.   The method of claim 15 wherein the board further includes a push button; and wherein the control logic further includes a one-button init connector, coupled with the push button, for restoring the server to a default state in response to the push button being depressed for a particular time.

17.   The method of claim 15 wherein the board further includes a push button; and

wherein the control logic further includes a shut-down connector, coupled with the

push button, the shut-down connector shutting down the server gracefully if the push button

is pressed for a particular time.

18.   The method of claim 15 wherein the control logic further includes a power-on

connector;wherein the computing device includes a system board; and

wherein the control logic further includes a power-on connector connecting to a

power-on connector of the system board for the computing device, coupled with the shut-

down push button, the power-on connector further turns the power supply on if the push

button is depressed when the computing device is supplied with AC power.

19.   The method of claim 15 further comprising the step of:

providing a light emitting diode (LED) connector; and

wherein the control logic further includes a status LED connector coupled with the

LED for indicating a operating status of the system.

20.   The method of claim 15 further comprising the step of:

providing a light emitting diode (LED) connector; and

wherein the control logic further includes a power-on LED connector coupled with

the LED for indicating a power status of the system.

21.   The method of claim 15 further comprising the step of:

providing a liquid crystal display (LCD) connector; and

wherein the control logic further includes a LCD display connector coupled with the

LCD for displaying a operating status of the system

22.   The method of claim 12 wherein the bus interface logic, the local BIOS

control logic, the flash memory and a set of control button connectors, light emitting diodes

(LED) connectors and a liquid crystal display (LCD) connector, are incorporated into a

single board.

23.   A method for providing a server-on-a-board on a computing device, the

computing device including at least a processor and an optional mass storage device, the

method comprising the steps of:

detecting a system for providing the server using bus interface logic in the system;

accessing a local control BIOS on the system;

using the local control BIOS for preparing the computing device for use as the server

and booting up the server, for accessing a memory in the system for storing a server image

for the server, the server image being provided to the computing device using the local

control BIOS.

24.   The method of claim 23 further comprising the steps of:

using a plurality of control button connectors allowing the server to be turned on,

shut down gracefully, or restored to its initial state, by a single press of buttons connected to

the plurality of control button connectors.

using the LED and LCD connectors allowing the system status to be displayed or

shown.